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10/688,994	10/21/2003	Hiroyuki Yoshida	4255-5	4547

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EXAMINER

TRINH, THANH TRUC

ART UNIT

PAPER NUMBER

1795

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/688,994

Applicant(s)

YOSHIDA ET AL.

Examiner

THANH-TRUC TRINH

Art Unit

1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/17/2008 has been entered.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 14 and 19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 1, 14 and 19 recite limitation "a unitary structure" in lines 5, 19 and 24 (claim 1); 6, 17 and 23 (claim 14); 7 and 19 (claim 19). There is no description of "a unitary structure" in the originally filed disclosure.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 14 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 14 and 19 recite the limitation "the final solar cell module" in lines 30 (claim 1), 29 (claim 14) and 20 (claim 19). There is insufficient antecedent basis for this limitation in the claims. In addition, claims 1, 14 and 19 also recite limitation "wherein, in the final cell module, there is substantially no gap between the one or more upper and lower sealing regions of the edge face sealing member and the one or more front and back surfaces of at least one of the solar cell module body or bodies, respectively, when the edge face sealing member is captured within at least one of the frame body or bodies while capturing at least one of the solar cell module body or bodies along substantially an entire edge portion perimeter " in lines 30-35 (claim 1), 29-34 (claim 14), 20-25 (claim 19); which is indefinite. It is unclear if the limitation describes a different structure (the final solar cell module) than that of the claimed solar cell module edge face sealing member (claims 1 and 19) or the claimed solar cell module (claim 14); or provides a use of the "solar cell module edge face sealing member" to produce a different structure, such as "the final solar cell module."

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
1. Claims 1, 3-6, 14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stein et al. (US Patent 5071491) in view of Yoda et al. (US Patent 6528718).

Regarding claim 1, as seen in Figures 1 and 7, Stein et al. discloses a solar cell module edge face sealing member (comprising seals 26 and insulator 27) for sealing one or more gaps between at least one of the solar cell module body (glass-plastic composite solar cell equipment 25) and at least one of the frame body (metallic frame 24), wherein the solar cell module body (25) is captured within frame body (24). Stein et al. describes that the seal coats the entire edge of solar cell module body (See col. 4 lines 5-7) and the insulation 27 functions as to insulate the upper and lower part of the electrical conductive frame 24 (See col. 4 lines 12-24). As seen in Figure 7, the upper and lower seals 26 and insulation (27) are either attached to each other directly or via

the frame (24) and functioning as a whole to seal the solar cell module body (25); therefore, it is the Examiner's position that the seals 26 and insulator 27 form a unit (to seal the solar cell module body 25), or the edge face sealing having an unitary structure (See definitions of "unitary" from Webster's Dictionary) and being formed in frame-like shape (See Figure 7) and in substantially parallel fashion with respect to one or more outer shapes of the solar cell module body. The edge face sealing member (combination of seal 26 and insulator 27) is substantially C-shaped in cross section or substantially U-shaped in cross section (See Figure 7). The edge face sealing member comprises upper sealing regions (upper seal 26 in Figure 7) abutting front surface of the solar cell module body (25), lower sealing regions (lower seal 26) abutting back surface of the solar cell module body (25), side sealing regions (insulation 27) abutting the edge face of the solar cell module body (25). (See Figure 7). The upper sealing region and the lower sealing region are disposed so as to open to the outside therefrom at either side from the edge portions of the side sealing region. The edge face sealing member (combination of the seal 26 and the insulation 27) captures the solar cell module body (25) along substantially an entire edge portion perimeter, and is captured within the frame body (24). As seen in Figure 7, Stein also teaches the edge face sealing member (combination of seal 26 and insulation 27) has ribs and being pressed against the surfaces of the solar cell module body (25) to make contact (See col. 3 line 65 to col. 4 line 24). Therefore it is the Examiner's position that the upper sealing region (or upper seal 26), the lower sealing region (or lower seal 26) and the side sealing region make a tight contact with the solar cell module body or bodies; and the edge face sealing

member having an unitary structure, because the seal 26 and insulation 27 are connected to each other either directly or via the frame 24, is captured within the frame body 24). Stein also teaches the edge face sealing member (combination of seal 26 and insulation 27) further comprises tip portions of the upper sealing region and the lower sealing region forming in a bent fashion toward a groove recess, wherein the distance between the tip portions is substantially the same or less than a thickness of the edge portion of the solar cell module body. (See Figure 7).

Stein et al. does not specifically teach in the final solar cell module there is substantially no gap between the one or more upper and lower sealing regions of the edge face sealing member and the one or more front and back surfaces of at least one of the solar cell module body or bodies. However, Stein et al. teaches the seals (26) are made of rubber (See col. 4 lines 15-16) and flexible and bendable as depicted in Figure 7. As seen in Figures 3, 4B, 5B, Yoda et al. teaches a solar cell module, wherein there is substantially no gap between the upper and lower sealing regions (e.g. horizontal regions of rubber adhesive 4 – See col. 5 lines 9-11 of Yoda et al.) and the front and back surface of the solar cell module body (e.g. the surfaces of the front and the back covers 1 and 3). Therefore, it would have been obvious to one skilled in the art to implement the teachings of Stein et al. (flexible edge face sealing made of rubber) and press the upper and lower seals (26) to produce a final solar cell module with no gap between the upper and lower sealing regions of the edge face sealing member (seals 26) and the front and back surfaces of the solar cell module body (25) as taught by

Yoda et al., i.e., one would have understood that no gap between the seals and the solar module body gives better sealing and tighter holding to the solar cell module body.

Regarding claim 3, Stein et al. discloses the lower sealing region (lower seal 26) is longer than the upper sealing region (upper seal 26). (See Figure 7)

Regarding claim 4, Stein et al. describes the surface of the upper sealing region and the surface of the lower sealing region face each other, and one or more projections are formed on each surface. (See Figure 7).

Regarding claim 5, Stein et al. describes the projections comprise single-rib (upper seal) and multiple-rib (lower seal 26) formed in parallel fashion. (See Figure 7).

Regarding claim 6, Stein et al. describes the tip portions of the upper and lower sealing region disposed in inclined fashion. (See Figure 7).

Regarding claim 14, as seen in Figure 7, Stein et al. discloses a solar cell module comprising a solar cell module body (25) captured within a frame body (metallic frame 24), wherein an edge face sealing member (combination of seal 26 and insulation 27), frame-like in structure, are formed in substantially parallel fashion with respect to one or more outer shape of the solar cell module body. The edge face sealing member is substantially C-shaped or U-shaped in cross section. As seen in Figure 7, the upper and lower seals 26 and insulation (27) are either attached to each other directly or via the frame (24) and functioning as a whole to seal the solar cell module body (25); therefore it is the Examiner's position that the seals (26) and insulator (27) form a unit (to seal the

solar cell module body 25), or the edge face sealing member (or combination of seal 26 and insulation 27) has an unitary structure (See definitions of "unitary" from Webster's Dictionary). The edge face sealing member (combination of seal 26 and insulation 27) comprises an upper sealing region (upper seal 26) abutting the front surface of the solar cell module body (25), an lower sealing region (lower seal 26) abutting the back surface of the solar cell module body, a side sealing region (insulation 27) abutting the edge face of the solar cell module body. The upper sealing region (upper seal 26) and the lower sealing region (lower seal 26) are disposed so as to open to the outside at either side from edge portions of the side sealing region (See Figure 7). The edge face sealing region member (combination of the seal 26 and the insulation 27) captures the solar cell module body (25) along substantial an entire edge portion perimeter, and is captured within the frame body (See Figure 7 and col. 3 line 65 to col. 4 line 24). As seen Figure 7, Stein et al. also describes the edge face sealing member (combination of seal 26 and insulation 27) has ribs being pressed against the surfaces of the solar cell module body to make contact (See col. 3 line 65 to col. 4 line 24). Therefore, it is the Examiner's position Stein teaches the upper sealing region (upper seal 26), the lower sealing region (lower seal 6) and the side sealing region (insulation 27) make a tight contact with the solar cell module body (25) when the edge face sealing member is captured within at least one of the frame body (24). The edge face sealing member (combination of seal 26 and insulation 27) further comprises tip portions of the upper sealing region and the lower sealing region forming in a bent fashion toward a groove recess (gap between the upper and lower seal 26), wherein the distance between the tip portions is substantially

the same or less than a thickness of the edge portion of the solar cell module body.
(See Figure 7 and col. 4 lines 5-24).

Stein et al. does not specifically teach in the final solar cell module there is substantially no gap between the one or more upper and lower sealing regions of the edge face sealing member and the one or more front and back surfaces of at least one of the solar cell module body or bodies. However, Stein et al. teaches the seals (26) are made of rubber (See col. 4 lines 15-16) and flexible and bendable as depicted in Figure 7. As seen in Figures 3, 4B, 5B, Yoda et al. teaches a solar cell module, wherein there is substantially no gap between the upper and lower sealing regions (e.g. horizontal regions of rubber adhesive 4 – See col. 5 lines 9-11 of Yoda et al.) and the front and back surface of the solar cell module body (e.g. the surfaces of the front and the back covers 1 and 3). Therefore, it would have been obvious to one skilled in the art to implement the teachings of Stein et al. (flexible edge face sealing made of rubber) and press the upper and lower seals (26) to produce a final solar cell module with no gap between the upper and lower sealing regions of the edge face sealing member (seals 26) and the front and back surfaces of the solar cell module body (25) as taught by Yoda et al., i.e., one would have understood that no gap between the seals and the solar module body gives better sealing and tighter holding to the solar cell module body.

Regarding claim 18, Stein et al. discloses projections extending inwardly from an interior surface of each of the sealing regions, wherein the tip portions extend further inwardly than the projections. (See Figure 7).

1. Claims 7-8 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stein et al. in view of Yoda et al., and further in view of Kataoka et al. (US Patent 6320115).

Regarding claims 5 and 15, Stein et al. in view of Yoda et al. teaches a solar cell module edge face sealing member or solar cell module as described in claims 1 and 14. Stein et al. teaches the solar cell module body (or glass-plastic composite solar cell equipment 25) comprises glass pane, solar cell, and plastic (See Figure 5 and col. 3 lines 50-65). Yoda et al. teaches using fillers 6a and 6b for light receiving-surface and back-surface sealing layers. (See Figure 1 of Yoda et al.)

Stein et al. in view of Yoda et al. does not teach using EVA (ethylene vinyl acetate) for light-receiving-surface and back-surface sealing resin layers.

Kataoka et al. teach using EVA for light-receiving-surface and back-surface sealing resin layers (502 and 504). (See Figure 5 and col. 10 lines 48-67 and col. 14 lines 15-57)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the module body of Stein et al. in view of Yoda et al. by using EVA for light-receiving-surface and back-surface sealing layers as taught by Kataoka et al., because it would provide an excellent protection, adhesion, durability. (See col. 10 lines 48-67 and col. 14 lines 15-57).

Regarding claim 8, Stein et al. also teach the seal 26 can be made of rubber (See col. 4 line 16). It is the Examiner's position that rubber is elastomer resin.

2. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stein et al. in view of Yoda et al. and Kataoka et al., and further in view of Kirchmann et al. (US Patent 6073936) .

Stein et al. in view of Yoda et al. and Kataoka et al. teaches a solar module edge face sealing member as described in claim 8.

Stein et al. in view of Yoda et al. and Kataoka et al. does not teach using polypropylene resin such as PP-EPDM or polystyrenic resin such as polystyrene-isoprene for sealing member.

Kirchmann et al. et al teach using SIS (a polystyrene-isoprene blend) and EPDM/PP (a polypropenic resin). (See col. 4 lines 4-16).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the module of Stein et al. in view of Yoda et al. and Kataoka et al. by using SIS or PP-EDPM for edge face sealing member as taught by Kirchmann et al., because it would provide a sealing with flexibility or elastic characteristic. (See '936 col. 3 lines 3-5 and col. 4 lines 4-16).

3. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stein et al. in view of Yoda et al., Kataoka et al. and Kirchmann et al. as applied to claim 9, and further in view of Kotani et al. (US Patent 5414030).

Stein et al. in view of Yoda et al., Kataoka et al. and Kirchmann et al. teach a solar cell module edge face sealing as described in claim 9.

Stein et al. in view of Yoda et al., Kataoka et al. and Kirchmann et al. does not teach using additive such as magnesium silicate or ultraviolet-resistant agents.

Regarding claim 11-12, Kotani et al. teach using magnesium silicate to an elastomer resin. (See col. 14 lines 39-68).

Regarding claim 13, Kotani et al. teach using ultraviolet absorbers, or an ultraviolet-resistant agent to an elastomeric resin. (See col. 11 lines 36-43 and col. 13 lines 22-31).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Stein et al. in view of Yoda et al., Kataoka et al. and Kirchmann et al. by adding additives such as magnesium silicate and ultraviolet-resistant agent as taught by Kotani et al., because it would improve weather resistance. (See col. 13 lines 22-31)

4. Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stein et al. in view of Yoda et al., and further in view of Hatsukaiwa et al (PGPub 20030034064).

Stein et al. in view of Yoda et al. teaches a solar cell module edge face sealing member as described in claim 1, wherein the edge portions of the edge face sealing member have angularly grooves. (See '491 Figure 7)

Stein et al. in view of Yoda et al. does not specifically teach the edge portions of the side sealing region are curved, nor do they teach the edge portions of the side sealing region have chamfered surfaces.

Regarding claim 16, Hatsukaiwa et al. teach the edge portions of the side sealing region of a solar cell module edge face sealing member (64a) are curved. (See '064 Figure 22)

Regarding claim 17, Hatsukaiwa et al. teach the edge portions of the side sealing region of a solar cell module edge face sealing member (64a) have chamfered surfaces. (See '064 Figure 22).

It would have been obvious to one ordinary skill in the art at the time the invention was made to modify the edge face sealing member of Stein et al. by having the edge portions of the side sealing curved or chamfered as taught by Hatsukaiwa et al., because a curved or chamfered surface of the edge portion of the edge sealing member is a matter of design choice.

5. Claims 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stein et al. (US Patent 5071491) in view of Yoda et al. and Hatsukaiwa et al (PGPub 20030034064).

Stein et al. discloses a solar cell module edge face sealing member comprising a solar cell module body (25) adapted to be provided in a frame body (metallic frame 24), an edge face sealing member (seal 26 and insulation 27) located between the frame

body (24) and the solar cell module body (25) to seal the gap between the frame body and the solar cell module body. The edge face sealing member (26 and 27) is frame-like in shape, formed in a substantially parallel fashion with respect to one or more outer shape of the solar cell module body (25), encapsulating the solar cell module body along substantially the entire edge portion perimeter of the solar cell module. As seen in Figure 7, the insulation (27), upper and lower seal 26 are connected to each other either directly or via the frame 24 and functioning as a whole to seal the solar cell module body (25); therefore it is the Examiner's position that the seals 26 and insulator 27 form a unit (to seal the solar cell module body 25), or the edge sealing member (combination of insulation and seal 26) has an unitary structure (See definitions of "unitary" from Webster's Dictionary). The edge face sealing member is substantially U-shaped. Each of the sidewalls of the edge face sealing member includes a distal end tip portion that is angled inwardly toward the solar cell module body relative to a main body of the sidewall. (See Figure 7). Stein et al teaches that the upper and lower seals 26 have ribs and being pressed against the surfaces of the solar cell module body (25) to make contact. (See Figure 7, col. 3 line 65 to col. 4 line 24). Therefore it is the Examiner's position that Stein teaches an upper sealing region (upper seal 26), a lower sealing region (lower seal 26) and side sealing region (insulation 27) make tight contact with the solar cell module body when the edge face sealing member having an unitary is captured within the frame body.

Stein et al. does not specifically teach in the final solar cell module there is substantially no gap between the one or more upper and lower sealing regions of the

edge face sealing member and the one or more front and back surfaces of at least one of the solar cell module body or bodies. However, Stein et al. teaches the seals (26) are made of rubber (See col. 4 lines 15-16) and flexible and bendable as depicted in Figure 7. Stein et al. also does not specifically teach the first and second sidewalls connected to each other via a bottom wall.

As seen in Figures 3, 4B, 5B, Yoda et al. teaches a solar cell module, wherein there is substantially no gap between the upper and lower sealing regions (e.g. horizontal regions of rubber adhesive 4 – See col. 5 lines 9-11 of Yoda et al.) and the front and back surface of the solar cell module body (e.g. the surfaces of the front and the back covers 1 and 3).

Hatsukaiwa et al. teach the sidewalls of an edge face sealing member (64a) connected to each other via a bottom wall. (See Figure 22).

It would have been obvious to one skilled in the art to implement the teachings of Stein et al. (flexible edge face sealing made of rubber) and press the upper and lower seals (26) to produce a final solar cell module with no gap between the upper and lower sealing regions of the edge face sealing member (seals 26) and the front and back surfaces of the solar cell module body (25) as taught by Yoda et al., i.e., one would have understood that no gap between the seals and the solar module body gives better sealing and tighter holding to the solar cell module body.

It would also have been obvious to one having ordinary skill in the art at the time the invention was made to modify the edge face sealing of Stein et al. by having the

sidewalls connected via the bottom wall as taught by Hatsukaiwa et al., because it would provide a proper fixing means and a protection from environmental elements. (See paragraphs [0095] and [0104])

Response to Arguments

Applicant's arguments with respect to claims 1, 3-19 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues the seals 26 and insulation 27 of Stein et al. is not "a unitary structure." However, the Examiner respectfully disagrees. By definitions of "unitary" provided by Webster's Dictionary, especially definitions 3a-b with examples, "unitary" is defined as relating to or involving the use of units (definition 3a), or made up of discrete units (definition 3c). Therefore the edge face sealing comprising seals 26 and insulation 27 is clearly a "unitary structure".

Applicant also argues does not teach the limitation "there is substantially no gap between the one or more upper and lower sealing regions of the edge face sealing member and the one or more front and back surfaces of at least one of the solar cell module body or bodies, respectively." First of all, this limitation is indefinite. This limitation is deemed to describe a different structure, or to provide use of the "solar cell module edge face sealing member" to produce a different structure, such as "the final solar cell module." Secondly, this argument is moot in view of new ground of rejection. Stein et al. teaches the seals (26) are made of rubber (See col. 4 lines 15-16) and flexible and bendable as depicted in Figure 7. Yoda et al. teaches a solar cell module,

wherein there is substantially no gap between the upper and lower sealing regions (e.g. horizontal regions of rubber adhesive 4 as seen in Figures 3, 4B, 5B – See col. 5 lines 9-11 of Yoda et al.) and the front and back surface of the solar cell module body (e.g. the surfaces of the front and the back covers 1 and 3). Therefore, it would have been obvious to one skilled in the art to implement the teachings of Stein et al. (flexible edge face sealing made of rubber) and press the upper and lower seals (26) to produce a final solar cell module with no gap between the upper and lower sealing regions of the edge face sealing member (seals 26) and the front and back surfaces of the solar cell module body (25) as taught by Yoda et al., i.e., one would have understood that no gap between the seals and the solar module body gives better sealing and tighter holding to the solar cell module body.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh-Truc Trinh whose telephone number is 571-272-6594. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on 571-272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TT
8/16/2008

/Nam X Nguyen/

Supervisory Patent Examiner, Art Unit 1753